

Creating RMarkdown Templates

Biostats KT 11 May 2023

Template Package

To create your own RMarkdown Template download the RstudioTemplates folder from the [department github](#)

The screenshot shows the GitHub interface for the repository `biostatsPMH / KT_Rounds`. The repository is public and has 1 branch and 0 tags. The `Code` tab is selected, and the `RstudioTemplates` folder is highlighted in the file list. The `Code` dropdown menu is open, showing options to clone the repository using HTTPS, SSH, or GitHub CLI, or to open it with GitHub Desktop or download it as a ZIP file.

Repository: `biostatsPMH / KT_Rounds` (Public)

Navigation: `<> Code` `Issues` `Pull requests` `Actions` `Projects` `Wiki` `Security` `Insights` `Settings`

Branches: `main` (1 branch) `0 tags`

Buttons: `Go to file` `Add file` `<> Code`

File List:

- `lisa-avery` Add files via upload
- `RstudioTemplates` Add files via upload
- `diagramTemplate.qmd` Add files via upload
- `wordTemplate.docx` Add files via upload

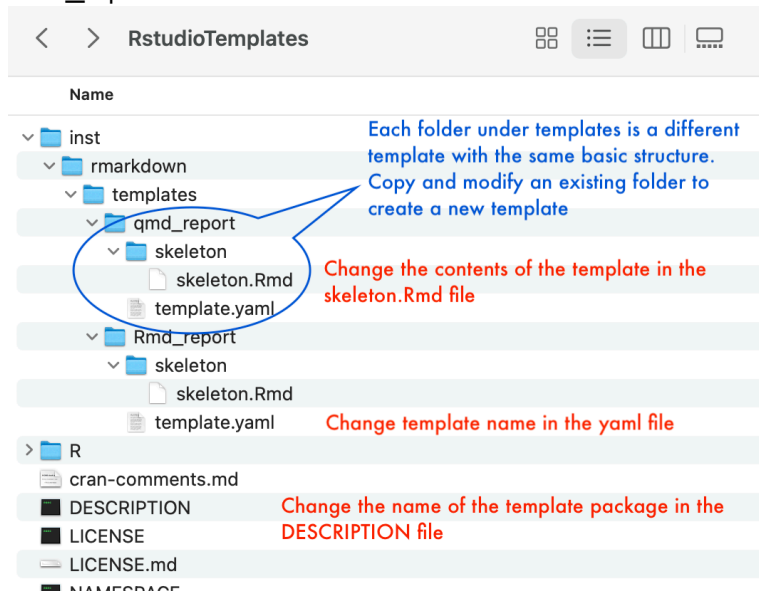
Help people interested in this repository understand your project by adding a description.

Clone options:

- `Local` `Codespaces` (New)
- `Clone`
- `HTTPS` `SSH` `GitHub CLI`
- `https://github.com/biostatsPMH/KT_Rounds.`
- Use Git or checkout with SVN using the web URL.
- `Open with GitHub Desktop`
- `Download ZIP`

Customising the Template

The package has two existing templates: `qmd_report` and `Rmd_report`



The screenshot shows the file explorer for the `RstudioTemplates` directory. The structure is as follows:

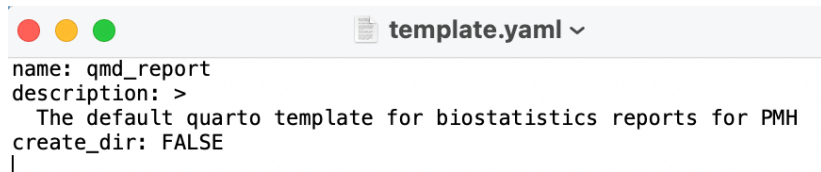
- `inst`
 - `rmarkdown`
 - `templates`
 - `qmd_report`
 - `skeleton`
 - `skeleton.Rmd`
 - `template.yaml`
 - `Rmd_report`
 - `skeleton`
 - `skeleton.Rmd`
 - `template.yaml`
 - `R`
 - `cran-comments.md`
 - `DESCRIPTION`
 - `LICENSE`
 - `LICENSE.md`
 - `NAMESPACE`

Annotations and instructions:

 - Each folder under templates is a different template with the same basic structure. Copy and modify an existing folder to create a new template
 - Change the contents of the template in the `skeleton.Rmd` file
 - Change template name in the `yaml` file
 - Change the name of the template package in the `DESCRIPTION` file

template.yaml file

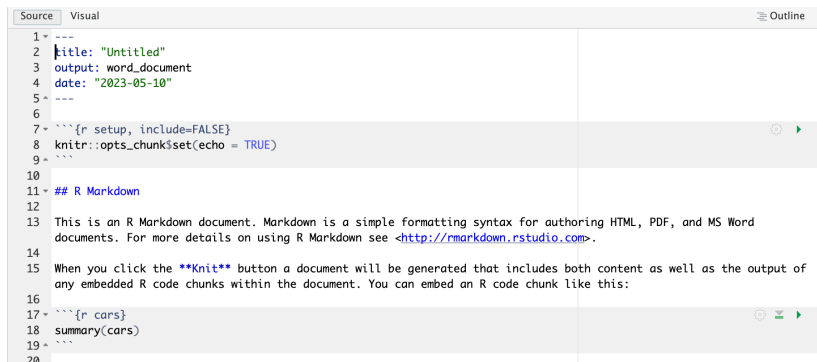
The template.yaml file is where you can change the name and description of your template



```
name: qmd_report
description: >
  The default quarto template for biostatistics reports for PMH
create_dir: FALSE
|
```

skeleton.Rmd file

The `skeleton.Rmd` file is the actual template. This is what you will see as a starting point when you open a new file.



The screenshot shows the RStudio Source pane with the `skeleton.Rmd` file open. The pane has tabs for 'Source' and 'Visual', with 'Source' selected. On the right side of the pane, there is an 'Outline' tab. The code in the Source pane is as follows:

```
1 ---
2 title: "Untitled"
3 output: word_document
4 date: "2023-05-10"
5 ---
6
7 ```{r setup, include=FALSE}
8 knitr::opts_chunk$set(echo = TRUE)
9 ```
10
11 ## R Markdown
12
13 This is an R Markdown document. Markdown is a simple formatting syntax for authoring HTML, PDF, and MS Word
14 documents. For more details on using R Markdown see <http://rmarkdown.rstudio.com>.
15
16 When you click the Knit button a document will be generated that includes both content as well as the output of
17 any embedded R code chunks within the document. You can embed an R code chunk like this:
18
19 ```{r cars}
20 summary(cars)
```

Updating skeleton.Rmd

You can customise the header, the setup, create new sections - anything

```
Source Visual Outline
1 ---
2 # This is called the document YAML
3 # Look here for more info: https://bookdown.org/yihui/rmarkdown/word-document.html
4 title: "Report Title"
5 author: "YOUR NAME HERE"
6 date: "`r format(Sys.time(), '%d %B, %Y')`"
7 output:
8   bookdown::word_document2:
9     toc: yes
10    number_sections: FALSE
11    fig-width: 6
12    fig-height: 4
13 # You can add in a word template - this path will be interpreted relative to the Rmd report file
14 #   reference_docx: 'wordTemplate.docx'
15 # Also, bib and csl files can be referenced
16 # bibliography:
17 #   - bibfile.bib
18 #   csl: Vancouver.csl
19   bookdown::pdf_document2:
20     latex_engine: xelatex
21 ---
22
23 ```{r setup, include=FALSE}
24 knitr::opts_chunk$set(echo = FALSE, warning = FALSE, message = FALSE, comment = '', dpi=300)
25
26 # # You made need this to get special characters to work for PDF reports
27 # knitr::opts_chunk$set(echo = FALSE, warning = FALSE, message = FALSE, comment = '', dpi=300, dev="cairo_pdf")
28 library(tidyverse)
29 library(reportRmd)
30
```

Installing Your Template

To use your template you need to install the package

The screenshot shows the RStudio interface with the 'Build' menu open. The 'Install Package' option is highlighted in blue. The 'History' tab at the bottom left is also highlighted with a red circle, showing a list of installed packages including 'RstudioTemplates'.

Build Menu Options:

- Load All
- Install Package**
- Test Package
- Check Package
- Build Source Package
- Build Binary Package
- Document
- Stop Build
- Configure Build Tools...

History Tab:

Package	Size	Modified
.gitignore	44 B	Jan 12, 2022, 12:13 PM
.Rbuildignore	83 B	Jan 12, 2022, 12:14 PM
.Rhistory	5 KB	May 10, 2023, 8:53 AM
cran-comments.md	81 B	Jan 12, 2022, 12:14 PM
DESCRIPTION	442 B	May 9, 2023, 1:59 PM
inst		
LICENSE	47 B	Jan 12, 2022, 12:14 PM
LICENSE.md	1.1 KB	Jan 12, 2022, 12:14 PM
NAMESPACE	46 B	Jan 12, 2022, 12:14 PM
R		
README.md	1.2 KB	May 9, 2023, 1:59 PM
README.Rmd	1.3 KB	May 9, 2023, 1:59 PM
Rtemplate.Rproj	413 B	May 10, 2023, 9:06 AM

Console Output:

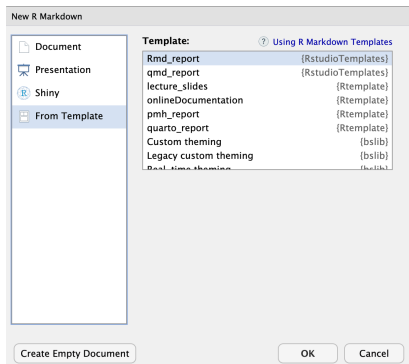
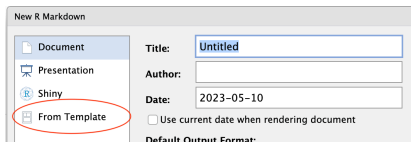
```
Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

> |
```

Using Your Template



Customising a Word Template

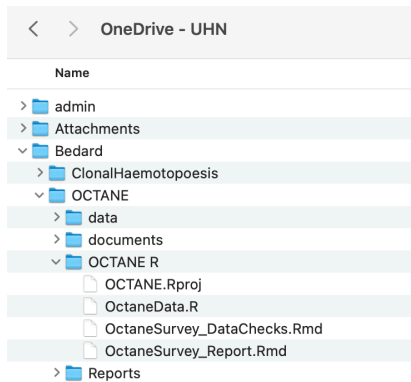
You can use a custom Word template for all of your reports. This is simply any Word document where you have modified the styles to suit your tastes. I put my template on the department [github](#)

I keep my wordTemplate.docx in my OneDrive - UHN folder.

If I want to use this template in the OctaneSurvey_Report.Rmd then the line in my yaml would be:

reference_docx:

```
'../../../../../wordTemplate.docx'
```



This tells the Rmd file to look back three directories for the wordTemplate.docx file

Quarto Templates

For those of you who use Quarto (and you should!) there is no method for creating quarto templates yet.

An easy workaround is to make a qmd template (with Quarto yaml) and save as a skeleton.Rmd file - this is what I have done in the qmd_report template.

After you save the file for the first time change the extension from qmd to Rmd and that's it.

Using Quarto

Recent versions of RStudio have Quarto editors.

Quarto is nearly exactly the same as Rmarkdown, but it has a wysiwyg editor.

You can get started [here](#)